UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/840,521	04/23/2001	David Guedalia	NMS03-08	4862

			EXAMINER
22468	7590	04/13/2004	BRANT, DMITRY

CHAPIN & HUANG L.L.C.
WESTBOROUGH OFFICE PARK
1700 WEST PARK DRIVE, SUITE 120
WESTBOROUGH, MA 01581

ART UNIT	PAPER NUMBER
2655	10

DATE MAILED: 04/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _4/23/2001_.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-40_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-40_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _4,5_.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed
> publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2.   Claims 1-4, 6-7,10-14, 16, 20-24, 26-27, 30-34, 36,40 are rejected under 35

U.S.C. 102(a) as being anticipated by Brotman et al. (5,917,890)

The U.S. patent of Brotman et al. teach computer-based apparatus (system) and

hence the methods and computer code necessary to implement this system are

inevitably part of their teachings.

The table below summarizes the limitations of this application and parts of

Brotmant et al. that meet these limitations.

Claim #	Limitations	Brotman et al.
1, 21	A method for speech recognition of an alphabet comprising: receiving an audio input including at least one letter of an alphabet and at least one word recognizing said at least one letter of an alphabet and said at least one word in said audio input	System receives alphabetic character (**elem. 120, FIG. 2**) and disambiguation word (**elem. 170, FIG. 2 and Col. 5, lines 9-12**) System recognizes the letter (**elem. 130, FIG. 2**) and a word (**elem. 180, FIG. 2**)

		and mapping said at least one word to said at least one letter.	System performs mapping of word to letter (**elem. 220, FIG. 2**)
2,22	A method according to claim 1 and wherein said audio input is received via a telephone.		Input is received from the telephone (**elem. 910, FIG. 1**)
3.23	A method according to claim 1 and wherein said audio input is received via a microphone.		Inherently, the telephone handset comprises a microphone that receives input speech. (**elem. 910, FIG. 1**)
4,24	A method according to claim 1 and wherein said at least one word is selected from a set of names.		"N for Nancy, M for Mary, etc.." (**Col. 5, lines 12-13**)
6,26	A method according to claim 1 and also comprising providing an audio feedback of letters of an alphabet to which recognized words are mapped.		System inquires whether the candidate alphabetic character was the spoken character (**elem. 230, FIG. 2**) and receives affirmation from a user (**elem. 240, FIG. 2**)
7,27	A method according to claim 1 and also comprising combining a plurality of said at least one letters into a target word.		System asks the user to spell his name using alphabetic characters (**elem. 110, FIG. 2 and Col. 4, lines 6-13**). Inherently, the final combination of pronounced letters will spell-out user's name as a complete word.
10,30	A method according to claim 1 and wherein said mapping comprises matching the first letter of said at least one word to said at least one letter.		System matches Nancy to N, Mary to M, etc (**elem. 190, FIG. 2 and Col. 5, lines 12-13**)
11,31	A method for speech recognition of an alphabet comprising: receiving an audio input including at least one target word made up of a plurality of letters in an alphabet and at least one auxiliary word corresponding to each of said plurality of letters		System asks the user to spell-out his name (target word) using alphabetic characters (**elem. 110, FIG. 2 and Col. 4, lines 6-13**). For each letter of the user's name, system receives alphabetic character (**elem. 120, FIG. 2**) and disambiguation word (**elem. 170, FIG. 2 and Col. 5, lines 9-12**).
		recognizing said plurality of auxiliary words in said audio input	System recognizes each disambiguation word (**elem. 180, FIG. 2**)
		mapping each of said plurality of auxiliary words	For each disambiguation word,

	to a corresponding one of said plurality of letters	system performs maps the word to the letter (**elem. 220, FIG. 2**)
	and composing said target word from said plurality of letters.	Inherently, the final combination of pronounced letters will spell-out user's name as a complete word.
12,32	A method according to claim 11 and wherein said audio input is received via a telephone.	Input is received from the telephone (**elem. 910, FIG. 1**)
13,33	A method according to claim 11 and wherein said audio input is received via a microphone.	Inherently, the telephone handset comprises a microphone that receives input speech. (**elem. 910, FIG. 1**)
14,34	A method according to claim 11 and wherein said plurality of auxiliary words is selected from a set of names.	"N for Nancy, M for Mary, etc.." (**Col. 5, lines 12-13**)
16,36	A method according to claim 11 and also comprising providing an audio feedback of letters of said alphabet to which recognized auxiliary words are mapped.	System inquires whether the candidate alphabetic character was the spoken character (**elem. 230, FIG. 2**) and receives affirmation from a user (**elem. 240, FIG. 2**)
20,40	A method according to claim 11 and wherein said mapping comprises matching the first letter of each of said plurality of auxiliary words to said at least one letter.	System matches Nancy to N, Mary to M, etc (**elem. 190, FIG. 2 and Col. 5, lines 12-13**)

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   The U.S. patent of Brotman et al. teach computer-based apparatus (system) and

hence the methods and computer code necessary to implement these system are

inevitably part of their teachings.

5.   Claims 5,15, 17, 25, 35 and 37 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Brotman et al.

        As per claims 5,15, 25, and 35, Brotman et al. disclose using disambiguating

words that are selected from a set of names (Col 5, lines 12-13).

        Brotman et al. do not disclose using disambiguating words that are "selected

from a set of names of fruits."

        However, it would have been obvious to one of ordinary skill in the art at the time

the invention was made to modify Brotman to use fruit names instead of people's

names, as this would increase the variety of words that could be used for

disambiguation. The method of spelling-out names to telephone operators using

common object names is well-known. The applicant has not provided an explanation of

the advantages gained by using fruit names. Perhaps fruit names, rather than English

names, are more recognizable to non-native speakers of English.

        As per claims 17 and 37, Brotman et el. disclose the system that asks the user to

spell his name using alphabetic characters (110, FIG. 2 and Col. 4, lines 6-13)

        Brotman et al. do not disclose that "composing [a word] comprises combining

said plurality of said at least one letters in the order recognized into said target word."

It would have been obvious to one of ordinary skill in the art at the time the invention was made that spelling-out a name necessarily involves combining inputted letters in the order they are received from the user to form a complete name, as not entirely combining the letters or placing them in alternative order would lead to mistakes in recognition. The method of spelling-out names to telephone operators using individual letters is well-known in the art and everyday life.

6.   Claims 8-9, 18-19, 28-29, 38-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brotman et al. in view of Rossides (5,454,063)

Brotman et al. do not teach annunciating the target word to the user, where the target word is announced before all letters are mapped.

Rossides teaches annunciating the final word (85, FIG. 7a) to the user and also announcing the word before all letters are entered when a unique match is found. (FIG. 7a and Col.14, line 62 - Col. 15, line 6)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Brotman as taught by Rossides in order to improve the accuracy and speed of the recognition system, since announcing the word back to the user would ensure synchronization between the user and the system. Also, announcing the word before it is completely spelled out would speed up the input process because many fairly unique words do not have to be spelled out in their entirety for the recognition program to understand them.

Conclusion

7.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

Mann (6,629,071) teaches an alphanumeric speech recognition system that is <u>very</u>

<u>similar</u> to applicant's invention.

Franceschi (6,321,196) teaches phonetic spelling system.

Brotman et al. (5,917,889) teaches a method of inputting alphanumeric characters in

telephones.

Tang (5,995,934) teaches associating Chinese characters with well-known names.

Alleva et al. (6,694,296) teaches recognition of spoken words using spelling.

8.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Dmitry Brant whose telephone number is (703) 305-

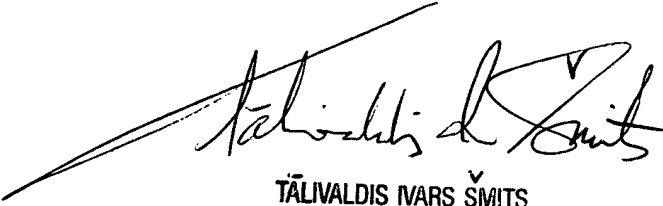8954. The examiner can normally be reached on Mon. - Fri. (8:30am - 5pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Talivaldis Ivars Smits can be reached on (703) 306-3011. The fax phone

number for the organization where this application or proceeding is assigned is (703)

872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Tech Center 2600 receptionist whose telephone number is (703) 305- 4700.

DB

4/1/04

TĀLIVALDIS IVARS SMITS
PRIMARY EXAMINER